

3 ~~2~~ (Currently amended) The computer implemented method of ~~claim 1~~ further claim 68 comprising:

determining not to associate the first component product with the customizable product ~~instance~~ if the customizable class rule limits association of the first component product with the customizable product ~~instance~~.

4 ~~3~~ (Currently amended) The computer implemented method of ~~claim 1~~ further claim 68 comprising:

determining to associate the first component product with the customizable product ~~instance~~ if the customizable class rule allows association of the first component product with the customizable product ~~instance~~;

associating the first component product with the customizable product ~~instance~~;

determining to associate a second component product with the customizable product ~~instance~~ upon the associating the first component product if the customizable class rule requires association of the first component product with the second component product; and

associating the second component product with the customizable product ~~instance~~.

~~5~~ (Canceled)

8 ~~5~~ (Currently amended) The computer implemented method of claim 1, comprising:  
~~wherein the providing the set of component products comprises~~

providing a user interface for each component product in the set of component products, wherein the user interface comprises a theme user interface, a control user interface, and a group user interface.

6. (Canceled)

5x (Currently amended) The computer implemented method of ~~claim 1~~ claim 68, wherein two or more component products from the set of component products are associated with the customizable product instance.

18x (Currently amended) A machine-readable medium that provides instructions, which when executed recorded on a computer-readable storage medium and executable by a set of one or more processors to [[,]] cause the set of one or more processors to perform operations of customizing a product comprising:

~~providing a set of one or more customizable product classes;~~

~~receiving a template comprising identifiers and operators, wherein:~~

the identifiers identify one or more component products from a set of component products, and

the identified component products comprise a first component product, and generating a customizable class rule based on the identifiers and on relationships associated with the operators;

~~receiving, during a runtime session, a request to designate a customizable product class from the set of customizable product classes as a customizable product instance;~~

~~receiving a request to associate a first component product from a set of component products with the customizable product instance; and~~

wherein the customizable class rule indicates at least one configuration restriction for at least one customizable product, determining, during a runtime session, whether to associate the first component product with the customizable product instance based on the customizable class rule.

20<sup>19</sup> (Currently amended) The machine-readable medium of ~~claim 8~~ claim 69, the operations ~~further~~ comprising:

determining not to associate the first component product with the customizable product ~~instance~~ if the customizable class rule limits association of the first component product with the customizable product ~~instance~~.

21<sup>19</sup> (Currently amended) The machine-readable medium of ~~claim 8~~ claim 69, the operations ~~further~~ comprising:

determining to associate the first component product with the customizable product ~~instance~~ if the customizable class rule allows association of the first component product with the customizable product ~~instance~~;

associating the first component product with the customizable product ~~instance~~;

determining to associate a second component product to the customizable product ~~instance~~ upon the associating the first component product if the customizable class rule requires associating the first component product with the second component product; and

associating the second component product with the customizable product ~~instance~~.

22<sup>11</sup> (Canceled)

22<sup>19</sup> (Currently amended) The machine-readable medium of ~~claim 8~~ claim 69, wherein the providing the set of component products comprises providing a user interface for each component product in the set of component products.

23<sup>22</sup> (Currently amended) The machine-readable medium of ~~claim 12~~ claim 69, wherein the user interface comprises a theme user interface, a control user interface, and a group user interface.

24<sup>19</sup> (Currently amended) The machine-readable medium of ~~claim 8~~ claim 69, wherein two or more component products from the set of component products are associated with the customizable product ~~instance~~.

30 18. (Currently amended) A computer implemented method of ~~customizing a product~~ comprising:

receiving a template comprising identifiers and operators, wherein:

the identifiers identify component products from a set of component products, and

generating a set of customizable class rules based on the identifiers and on relationships associated with the operators, wherein the set of customizable class rules [[that]] define at least one relationship among two or more of the identified component products;

~~designating a customizable product class from a set of customizable product classes as a customizable product instance;~~

~~selecting, during a runtime session, a first component product from a set of component products to form a customizable product; and~~

~~associating, during the runtime session, the a first component product with the customizable product instance based on a customizable class rule, among the set of customizable class rules, that applies to the customizable product instance.~~

31 18. (Currently amended) The computer implemented method of claim 15, <sup>30</sup> further comprising selecting a second component product to add to the customizable product, wherein the selecting is based on the first component product and at least one of the customizable class rules.

32 18. (Currently amended) The computer implemented method of claim 15, <sup>30</sup> further comprising selecting two or more component products associated with the customizable product class.

33 18. (Currently amended) The computer implemented method of claim 15, <sup>30</sup> further comprising associating a second component product with the customizable product instance upon the selecting based on at least one of the customizable class rules.

~~19-23. (Canceled)~~

~~36-24.~~ (Currently amended) A machine-readable medium that provides instructions, ~~which when executed recorded on a computer-readable storage medium and executable by a set of one or more processors to [[]] cause the set of one or more processors to perform operations of customizing a product comprising:~~

~~receiving a template comprising identifiers and operators, wherein:~~

~~the identifiers identify component products from a set of component products, and~~

~~generating a set of customizable class rules based on the identifiers and on relationships associated with the operators, wherein the set of customizable class rules [[]] define at least one relationship among two or more of the identified component products;~~

~~designating a customizable product class from a set of customizable product classes as a customizable product instance;~~

~~selecting, during a runtime session, a first component product from a set of component products to form a customizable product; and~~

~~associating, during the runtime session, the a first component product with the customizable product instance based on a customizable class rule, among the set of customizable class rules, that applies to the customizable product instance.~~

~~37-25.~~ (Currently amended) The machine-readable medium of claim <sup>36</sup>~~24~~, wherein the operations further comprise selecting from a set of alternative component products to add to the customizable product, wherein the selecting is based upon the first component product.

~~38-26.~~ (Currently amended) The machine-readable medium of claim <sup>36</sup>~~24~~, wherein the customizable product rules comprise pricing information and allow for discount pricing, and the operations further comprise selecting two or more component products associated with the customizable product class. .

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52-27. (Currently amended) The machine-readable medium of claim 24, wherein the operations ~~further~~ comprise associating a second component product with the customizable product ~~instance~~ upon the selecting based on at least one of the customizable class rules.

~~28-30.~~ (Canceled)

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40-37. (Currently amended) The machine-readable medium of claim 37, wherein the customizable product rule comprises component product information to guide a consumer in a selection of the customizable product, and the component product is displayed in a user interface.

~~32.~~ (Canceled)

42-38. (Currently amended) An apparatus ~~to customize a product~~ comprising:  
 a memory to store a set of one or more customizable product classes; and  
 a processor, coupled to the memory and configured to:  
     identify a set of component products,  
     receive a template comprising identifiers and operators, wherein:  
         the identifiers identify one or more component products from a set of  
         component products, and  
         the identified component products comprise a first component  
         product, and  
     generate a customizable class rule based on the identifiers and on relationships  
     associated with the operators,  
     receive a request to designate a customizable product class from the set of  
     customizable product classes as a customizable product instance;  
     receive, during a runtime session, a request to associate a first component  
     product from a set of component products with the customizable  
     product instance; and

wherein the customizable class rule indicates at least one configuration restriction for at least one customizable product, determine, during the runtime session, whether to associate the first component product with the customizable product instance based on the customizable class rule.

44. <sup>43</sup> (Currently amended) The apparatus of claim 33 claim 20, wherein the processor is further configured to determine not to associate the first component product with the customizable product instance if the customizable class rule limits association of the first component product with the customizable product instance.

45. <sup>43</sup> (Currently amended) The apparatus of claim 33 claim 70, wherein the processor is further configured to:  
determine to associate the first component product with the customizable product instance if the customizable class rule allows association of the first component product with the customizable product instance; and  
associate the first component product with the customizable product instance.

~~36-38.~~ (Canceled)

46. <sup>43</sup> (Currently amended) The apparatus of claim 33 claim 70, wherein two or more component products from the set of component products are associated with the customizable product instance.

~~40.~~ (Canceled)

9. <sup>44</sup> (Currently amended) The computer implemented method of claim 1, further comprising:

converting the customizable class rule from a natural language format into a low-level computer language.

10 ~~42~~ (Previously presented) The computer implemented method of claim 1, wherein the customizable class rule comprises an expression relating to an attribute of a component product.

11 ~~43~~ (Previously presented) The computer implemented method of claim 1, wherein the customizable class rule defines at least one relationship among the customizable product classes.

~~44~~ (Canceled)

26 ~~45~~ (Currently amended) The machine-readable medium of claim <sup>18</sup>8, the operations further comprising:

converting the customizable class rule from a natural language format into a low-level computer language.

27 ~~45~~ (Previously presented) The machine-readable medium of claim <sup>18</sup>8, wherein the customizable class rule comprises an expression relating to an attribute of a component product.

28 ~~47~~ (Previously presented) The machine-readable medium of claim <sup>18</sup>8, wherein the customizable class rule defines at least one relationship among the customizable product classes.

34 ~~48~~ (Currently amended) The computer implemented method of claim <sup>24</sup>15, further comprising:

converting the customizable class rules from a natural language format into a low-level computer language.

49-50. (Canceled)

51. (Canceled)

52-54. (Canceled)



6 ~~55~~ (Currently amended) The computer implemented method of ~~claim 1 further claim 55~~, comprising:

generating, in response to the request to associate, a recommendation message based on the customized class rule.

7 ~~56~~ (Currently amended) The computer implemented method of claim ~~55~~, further comprising:

transmitting the recommendation message to a user, wherein the request to associate is received from the user.

12 ~~57~~ (Currently amended) The computer implemented method of claim 1, wherein the ~~identifiers comprise customizable class rule comprises~~ a user-specified text identifier, and ~~the operators comprise~~ a text operator that applies to the user-specified text identifier.

~~58~~ (Canceled)

13 ~~59~~ (Previously presented) The computer implemented method of claim ~~57~~, wherein the text operator comprises at least one of: a requirement operator, a conditional operator, a conjunction operator, and an exclusion operator.

14 60. (Previously presented) The computer implemented method of claim ~~57~~, wherein the text operator comprises at least one of: an addition operator, a subtraction operator, a multiplication operator, and an absolute value operator.

15 61. (Previously presented) The computer implemented method of claim ~~57~~, wherein the user-specified text identifier refers to an account status and the text operator comprises an equivalence operator.

16 ~~62~~ (Previously presented) The computer implemented method of claim ~~57~~, wherein the user-specified text identifier refers to at least one of: a product class, a cardinal number, a customer evaluation, a transaction upgrade, a customer attribute, or a geographic location.

65. (Currently amended) The machine-readable medium of claim 19, the operations further comprising:

generating, in response to the request to associate, a recommendation message based on the customized class rule, wherein the request to associate is received from a user; and  
transmitting the recommendation message to the user.

66. (Currently amended) The machine-readable medium of claim 18, wherein the identifiers comprise ~~customizable class rules comprises~~ a user-specified text identifier, wherein ~~the user-specified text identifier refers to input received during the runtime session~~, and the operators comprise a text operator that applies to the user-specified text identifier.

67. (Currently amended) The computer implemented method of claim 15, wherein the ~~set of customizable class rules comprises~~ identifiers comprise a user-specified text identifier, wherein ~~the user-specified text identifier refers to input received during the runtime session~~, and the operators comprise a text operator that applies to the user-specified text identifier.

68. (Currently amended) The machine-readable medium of claim 24, wherein the ~~set of customizable class rules comprises~~ identifiers comprise a user-specified text identifier, wherein ~~the user-specified text identifier refers to input received during the runtime session~~, and the operators comprise a text operator that applies to the user-specified text identifier.

69. (Currently amended) The apparatus of claim 23, wherein the identifiers comprise ~~customizable class rules comprises~~ a user-specified text identifier, wherein ~~the user-specified text identifier refers to input received during the runtime session~~, and the operators comprise a text operator that applies to the user-specified text identifier.

208. (New) The computer implemented method of claim 1, comprising:  
 receiving, during a runtime session, a request to designate a customizable product;  
 receiving, during the runtime session, a request to associate the first component product  
 with the customizable product; and  
 determining whether to associate the first component product with the customizable  
 product based on the customizable class rule.

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19 60. (New) The machine-readable medium of claim 8, the operations comprising:  
 receiving, during a runtime session, a request to designate a customizable product;  
 receiving, during the runtime session, a request to associate the first component product  
 with the customizable product; and  
 determining whether to associate the first component product with the customizable  
 product based on the customizable class rule.

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43 10. (New) The apparatus of claim 33, wherein the processor is configured to:  
 receive, during a runtime session, a request to designate a customizable product;  
 receive, during the runtime session, a request to associate the first component product  
 with the customizable product; and  
 determine whether to associate the first component product with the customizable  
 product based on the customizable class rule.

17 21.

(New) The computer implemented method of claim 1, comprising:  
 receiving a list of values from a configuration expert for use in a batch rule; and  
 generating the template using the list of values by filling in blanks from a blank template  
 with the values in the received list of values.